Professional and Managerial Branch

### WATER DISTRIBUTION SYSTEM MANAGER

Engineering Group
Registered Engineer Series

03/03 (AM)

### General Purpose

Under general direction, manage water distribution system operation and maintenance through subordinate supervisors.

# **Typical Duties**

Participate in the planning and design of water and recycled water distribution systems, and other engineering projects, and direct development, construction and maintenance. Involves: Establish criteria and parameters to ensure functional, practical and economical designs. Review engineering studies, drawings and calculations. Prepare plans, specifications and cost estimates for in-house projects. Determine adjustment or relocation of existing or proposed water, sewer and utility lines when required. Oversee review of contracted work plans, specifications and other documents. Prepare construction and inspection schedules. Inspect work in progress to ensure design and timeline compliance. Solve engineering problems to rectify line breaks and other emergencies. Direct operation of dispatch functions. Develop and oversee implementation of preventive maintenance and other programs. Coordinate with functionally interested Federal, State and City departments such as Environmental Protection Agency (E.P.A.) and Texas Commission on Environmental Quality (TCEQ), to ensure standards and regulations compliance. Manage automated work order, workflow and asset tracking system. Oversee programs such as Leak-Detection and Cross-Connection Control.

Conduct water supply requirement, system improvement or other special studies. Involves: Investigate and take corrective actions regarding inadequate water pressure or other system malfunctions. Analyze existing methods and recommend modifications necessary to improve Utility operating efficiency, including new construction or renovation projects. Review plans for proposed subdivisions and structures prepared by private professional engineers and architects. Ensure adequate customer notification prior to foreseeable service interruptions. Direct the installation of new customer service taps and maintain service connections. Investigate, assess and prepare utility property and equipment damages reports. Assist supervisors in five year capital improvement program preparation.

Supervise assigned personnel. Involves: Oversee or personally engage in scheduling, assigning, instructing, guiding, checking and evaluating day-to-day work of staff for all shifts and locations. Enforce personnel rules and regulations, standards of conduct, work attendance, and safe working practices. Prepare employee performance appraisals and review evaluations prepared by subordinates. Recommend leave approvals. Initiate grievance resolution and disciplinary processes. Counsel, motivate and maintain harmonious working relationships among subordinates. Arrange for or engage in employee training and development. Recommend staffing and employee status changes. Interview applicants and recommend selection.

Perform related incidental managerial and professional duties contributing to the realization of unit or team objectives as required. Includes: Substitute for own supervisor, coworkers or subordinates as qualified and within authorized limits by carrying out specified functions to maintain continuity of ordinary operations, if delegated. Develop and implement goals, objectives and budgets related to operating and engineering activities in an assigned area as directed. Oversee preparation of records and reports and maintenance of completed jobs logs. Represent the Water Utilities at public hearings and meetings. Serve on ad hoc committees.

# Knowledge, Ab<mark>ilitie</mark>s and Ski<mark>lls</mark>

- Comprehensive knowledge of civil engineering principles and practices pertaining to water and wastewater systems design and operation.
- Comprehensive knowledge of water and wastewater construction project methods, materials, tools and equipment.
- Comprehensive knowledge of cost determination and work efficiency techniques.
- Comprehensive knowledge of safe working practices and procedures.
- Considerable knowledge of supervisory techniques.
- Considerable knowledge of federal, state and local water and wastewater distribution system laws, codes and ordinances.
- Ability to plan, design and coordinate engineering projects.
- Ability to determine project costs.

- Ability to prepare designs, plans and specifications.
- Ability to interpret plans and designs and identify defects.
- Ability to firmly and impartially exercise supervisory authority and enforce established rules and regulations.
- Ability to express oneself clearly and concisely, orally and in writing.
- Ability to establish and maintain effective working relationships with fellow employees, officials and the public.
- · Ability to maintain records and prepare reports.
- Skill in the safe operation and care of personal computer or network workstation, including computer-aided drafting and design (CADD) software.
- Skill in the safe operation and care of a motor vehicle.

### Other Job Characteristics

- Frequent work in a field environment which includes traversing uneven terrain to inspect work in progress.
- Occasional exposure to adverse weather conditions.
- Occasional driving through city traffic.

## Minimum Qualifications

Education and Experience: Equivalent to a combination of an accredited Bachelor's Degree in Civil, Sanitary, Chemical or Environmental Engineering plus six (6) years of progressively responsible professional engineering experience in a water or wastewater utility, including two (2) years experience as a registered professional engineer.

Licenses and Certificates: Registration as Professional Engineer in the State of Texas or a state having a reciprocal agreement at time of appointment. Registration as Professional Engineer in Texas required within one (1) year of appointment. Valid Texas Class "C" Driver's License or equivalent license issued by another state required by time of appointment.

Special Requirements: Subject to on-call during non-working hours and mandatory recall during periods of water utility emergency operations.

Human Resources Director	Department Head